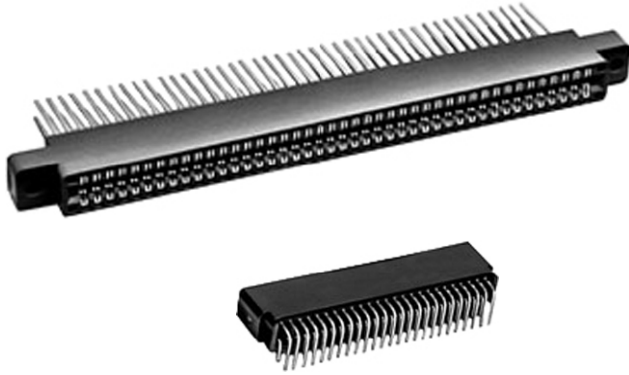


# Edgeboard Connectors, Dual Readout, 0.100" (2.54 mm) C-C, Standard and Right Angle Terminals



## ELECTRICAL SPECIFICATIONS

**Current Rating:** 3 A

**Test Voltage Between Contacts:**

at sea level: 650 V<sub>RMS</sub>

At 70 000 feet (21 336 meters): 275 V<sub>RMS</sub>

**Insulation Resistance:** 5000 MΩ minimum at 500 V<sub>DC</sub> potential

**Contact Resistance:** 30 mV maximum at rated current (with gold plating)

**Operating Temperature:** -65 °C to +125 °C

**Humidity:** 96 h at 90 % relative humidity at +40 °C, dried at room temperature for 3 h minimum, insulation resistance was greater than 5000 MΩ

**Durability:** after 500 cycles of insertion and withdrawal of a 0.070" (1.78 mm) thick steel test board, contact resistance less than 0.030 V at 3 A on gold plated contacts and individual contact pair separation force when measured with a 0.054" (1.37 mm) thick steel test blade was greater than 1/2 oz.

**Shock:** three 50G shocks in each of 3 mutually perpendicular planes with no loss of continuity

**Vibration:** 2 h in each of 3 mutually perpendicular planes, frequency sweep 10 cps to 55 cps at 0.06 double amplitude with no loss of continuity

## FEATURES

- Grid patterns: 0.100" C-C x 0.150" (2.54 mm x 3.81 mm) and 0.100" C-C x 0.200" (2.54 mm x 5.08 mm)
- Standard and right angle terminals
- Greater design latitude:  
body materials: glass-filled polyester and glass-filled polyphenylene sulfide  
7 contact termination styles - 3 standard, 4 right angle  
20 body sizes and 6 mounting styles
- Selective gold plating
- Accepts PC board thickness of 0.054" to 0.071" (1.37 mm to 1.80 mm)
- Polarization between contact positions in all sizes.  
Between contact polarization permits polarizing without loss of contact position

## APPLICATIONS

For use with 0.0625" (1.59 mm) printed circuit boards requiring an edgeboard type connector on 0.100" (2.54 mm) centers

## MATERIAL SPECIFICATIONS

**Body Material:**

"3" thermoplastic polyester, glass-filled, black, flame retardant (UL 94 V-0)

"5" thermoplastic polyphenylene sulfid, glass filled, brown, flame retardant (UL 94 V-0)

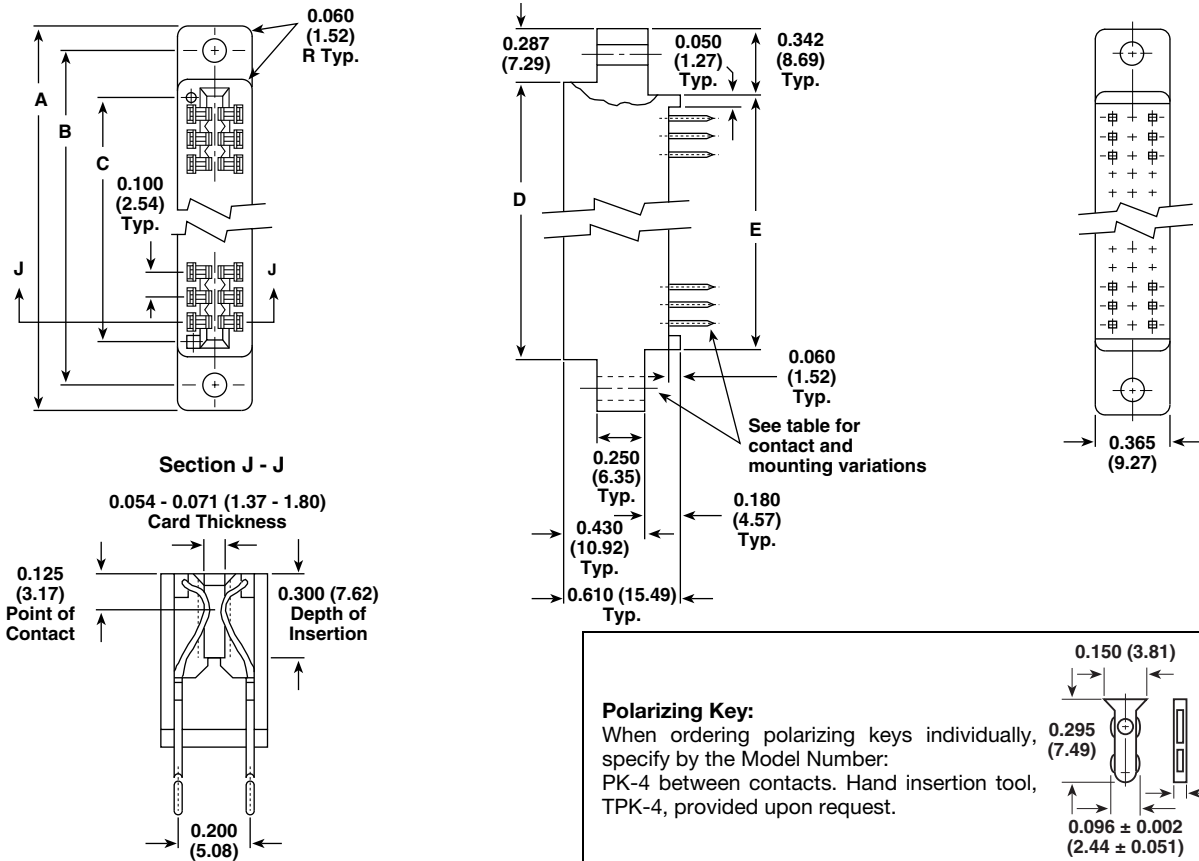
**Contacts:** phosphor bronze (see Ordering Information)

**Polarizing Key:** glass reinforced nylon, flame retardant (UL 94H-B)

**Plating:** gold (see Ordering Information)

## ORDERING INFORMATION

| EB4   | 3  | K                             | 20   | SG   | X                   | 15   |
|-------|--|-------------------------------|--|--|---------------------|--|
| MODEL | BODY MATERIAL  | STANDARD TERMINAL VARIATIONS  | CONTACTS PER SIDE  | CONTACT PLATING  | MOUNTING VARIATIONS | POLARIZING KEY POSITIONS   |
|       | 3 = glass-filled polyester<br>5 = glass-filled polyphenylene sulfide | C, D, K,<br>1R, 2R,<br>3R, 4R | 6, 10, 12,<br>15, 18, 20,<br>22, 25, 28,<br>30, 31, 35,<br>36, 40, 43,<br>44, 48, 49,<br>50, 60,<br>and 65 | SG = selective gold plating (0.00003" (0.000762 mm) minimum thick) on contact area with gold flash on terminal.<br>SGF = selective gold plating (0.000010" (0.000254 mm) minimum thick) on contact area with gold flash on terminal.<br>All gold plating over 0.00005" (0.00127 mm) minimum nickel underplate.<br>Contact factory for additional plating options |                     | Key(s) are located to right of position(s) designated. Use odd-numbered contact for ordering: -1, -3, -5, etc.<br>Required only when polarizing keys are to be factory installed.<br><b>Note:</b> to order polarizing keys individually, specify model PK-4. |

**DIMENSIONS** in inches (millimeters)


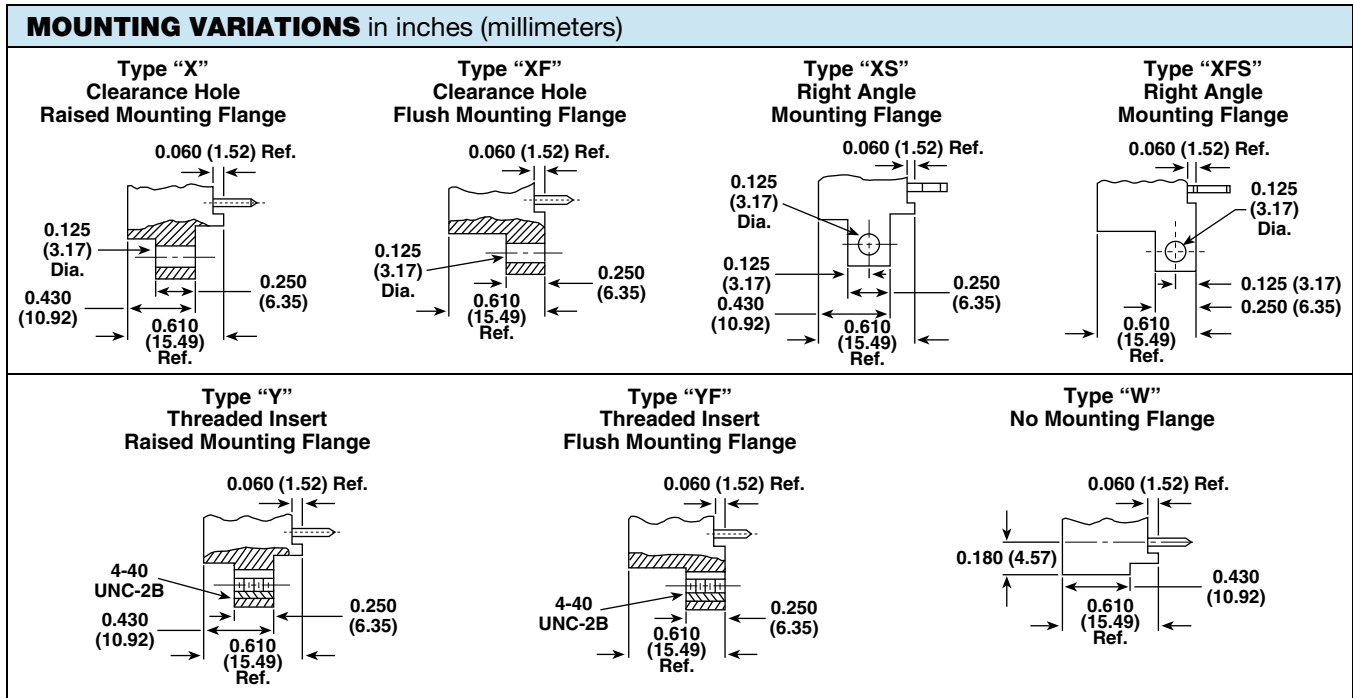
| # OF CONTACT POSITIONS PER SIDE | A              | B              | C              | D              | E              |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|
| 6                               | 1.435 (36.45)  | 1.175 (29.85)  | 0.700 (17.78)  | 0.860 (21.84)  | 0.750 (19.05)  |
| 10                              | 1.835 (46.61)  | 1.575 (40.00)  | 1.100 (27.94)  | 1.260 (32.00)  | 1.150 (29.21)  |
| 12                              | 2.035 (51.69)  | 1.775 (45.08)  | 1.300 (33.02)  | 1.460 (37.08)  | 1.350 (34.29)  |
| 15                              | 2.335 (59.31)  | 2.075 (52.70)  | 1.600 (40.64)  | 1.760 (44.70)  | 1.650 (41.91)  |
| 18                              | 2.635 (66.93)  | 2.375 (60.32)  | 1.900 (48.26)  | 2.060 (52.32)  | 1.950 (49.53)  |
| 20                              | 2.835 (72.01)  | 2.575 (65.40)  | 2.100 (53.34)  | 2.260 (57.40)  | 2.150 (54.61)  |
| 22                              | 3.035 (77.09)  | 2.775 (70.48)  | 2.300 (58.42)  | 2.460 (62.48)  | 2.350 (59.69)  |
| 25                              | 3.335 (84.71)  | 3.075 (78.10)  | 2.600 (66.04)  | 2.760 (70.10)  | 2.650 (67.31)  |
| 28                              | 3.635 (92.33)  | 3.375 (85.72)  | 2.900 (73.66)  | 3.060 (77.72)  | 2.950 (74.93)  |
| 30                              | 3.835 (97.41)  | 3.575 (90.80)  | 3.100 (78.74)  | 3.260 (82.80)  | 3.150 (80.01)  |
| 31                              | 3.935 (99.95)  | 3.675 (93.34)  | 3.200 (81.28)  | 3.360 (85.34)  | 3.250 (82.55)  |
| 35                              | 4.335 (110.11) | 4.075 (103.50) | 3.600 (91.44)  | 3.760 (95.50)  | 3.650 (92.71)  |
| 36                              | 4.435 (112.65) | 4.175 (106.04) | 3.700 (93.98)  | 3.860 (98.04)  | 3.750 (95.25)  |
| 40                              | 4.835 (122.81) | 4.575 (116.20) | 4.100 (104.14) | 4.260 (108.20) | 4.150 (105.41) |
| 43                              | 5.135 (130.43) | 4.875 (123.82) | 4.400 (111.76) | 4.560 (115.82) | 4.450 (113.03) |
| 44                              | 5.235 (132.97) | 4.975 (126.36) | 4.500 (114.30) | 4.660 (118.36) | 4.550 (115.57) |
| 48                              | 5.635 (143.13) | 5.375 (136.52) | 4.900 (124.46) | 5.060 (128.52) | 4.950 (125.73) |
| 49                              | 5.735 (145.67) | 5.475 (139.06) | 5.000 (127.00) | 5.160 (131.06) | 5.050 (128.27) |
| 50                              | 5.835 (148.21) | 5.575 (141.60) | 5.100 (129.54) | 5.260 (133.60) | 5.150 (130.81) |
| 60                              | 6.835 (173.61) | 6.575 (167.00) | 6.100 (154.94) | 6.260 (159.00) | 6.150 (156.21) |
| 65                              | 7.335 (186.31) | 7.075 (179.70) | 6.600 (167.64) | 6.760 (171.70) | 6.650 (168.91) |

**PHYSICAL SPECIFICATIONS**

**Contact Type:** bifurcated cantilever beam  
**Number of Contacts:** 10, 12, 15, 18, 20, 22, 25, 28, 30, 31, 35, 36, 40, 43, 44, 48, 49, 50, 60 and 65 per side  
**Contact Terminal Variation:** Standard terminals  
**Type “C”** - dip solder, 0.025" (0.635 mm) square terminals, 0.175" (4.44 mm) nominal terminal length below standoffs  
**Type “D”** - dip solder, 0.025" (0.635 mm) square terminals, 0.115" (2.92 mm) nominal terminal length below standoffs  
**Type “K”** - Wire Wrap™, 0.025" (0.635 mm) square terminals, 0.570" (14.48 mm) nominal terminal length below standoffs  
**Contact Terminal Variation:** Right angle terminals  
**Type “1R”** - dip solder, 0.025" (0.635 mm) square terminals, 0.120" (3.05 mm) nominal terminal length x 0.150" (3.81 mm) nominal terminal row spacing  
**Type “2R”** - dip solder, 0.025" (0.635 mm) square terminals, 0.120" (3.05 mm) nominal terminal length x 0.200" (5.08 mm) nominal terminal row spacing

**Type “3R”** - dip solder, 0.025" (0.635 mm) square terminals, 0.180" (4.57 mm) nominal terminal length x 0.150" (3.81 mm) nominal terminal row spacing  
**Type “4R”** - dip solder, 0.025" (0.635 mm) square terminals, 0.180" (4.57 mm) nominal terminal length x 0.200" (5.08 mm) nominal terminal row spacing  
**Contact Spacing:** 0.100" (2.54 mm) center to center  
**Contact Terminal Row Spacing:** Standard - 0.200" (5.08 mm) nominal. Right angle - 0.200" (5.08 mm) nominal and 0.150" (3.81 mm) nominal  
**Card Thickness:** 0.054" to 0.071" (1.37 mm to 1.80 mm)  
**Card Slot Depth:** 0.300" (7.62 mm)  
**Connector Polarization:** between contact polarization key(s) are located to the right of the contact position(s) designated

**Note**  
 • High temperature burn-in, edgeboard connectors, with 0.100" (2.54 mm) center to center are on [www.vishay.com/doc?36006](http://www.vishay.com/doc?36006)



**TERMINAL VARIATIONS** in inches (millimeters)

| TYPE | A            | B                            |
|------|--------------|------------------------------|
| 1R   | 0.150 (3.81) | 0.120 ± 0.030 (3.05 ± 0.762) |
| 2R   | 0.200 (5.08) | 0.120 ± 0.030 (3.05 ± 0.762) |
| 3R   | 0.150 (3.81) | 0.180 ± 0.030 (4.57 ± 0.762) |
| 4R   | 0.200 (5.08) | 0.180 ± 0.030 (4.57 ± 0.762) |

**Type “C” and “D” Solder Dip, Standard 0.025 (0.635) Square Terminals**  
 0.200 (5.08) (terminal length)  
 To Fit 0.050 ± 0.002 (1.27 ± 0.051) Dia. Eyelet  
 “C” = 0.175 (4.44)  
 “D” = 0.115 (2.92)

**Type “K” Wire Wrap™, Standard 0.025 (0.635) Square Terminals**  
 0.200 (5.08) (terminal length)  
 0.570 (14.48) (terminal length)

**Type “1R”, “2R”, “3R” and “4R” Right Angle 0.025 (0.635) Square Terminals**  
 0.590 (14.99) (terminal length)  
 A (terminal length)  
 B (terminal length)



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